



Title: CROSS-POLLINATION OF MULTIPLE SYNC SOURCES
Inventors: Jason Evan Schleifer et al.
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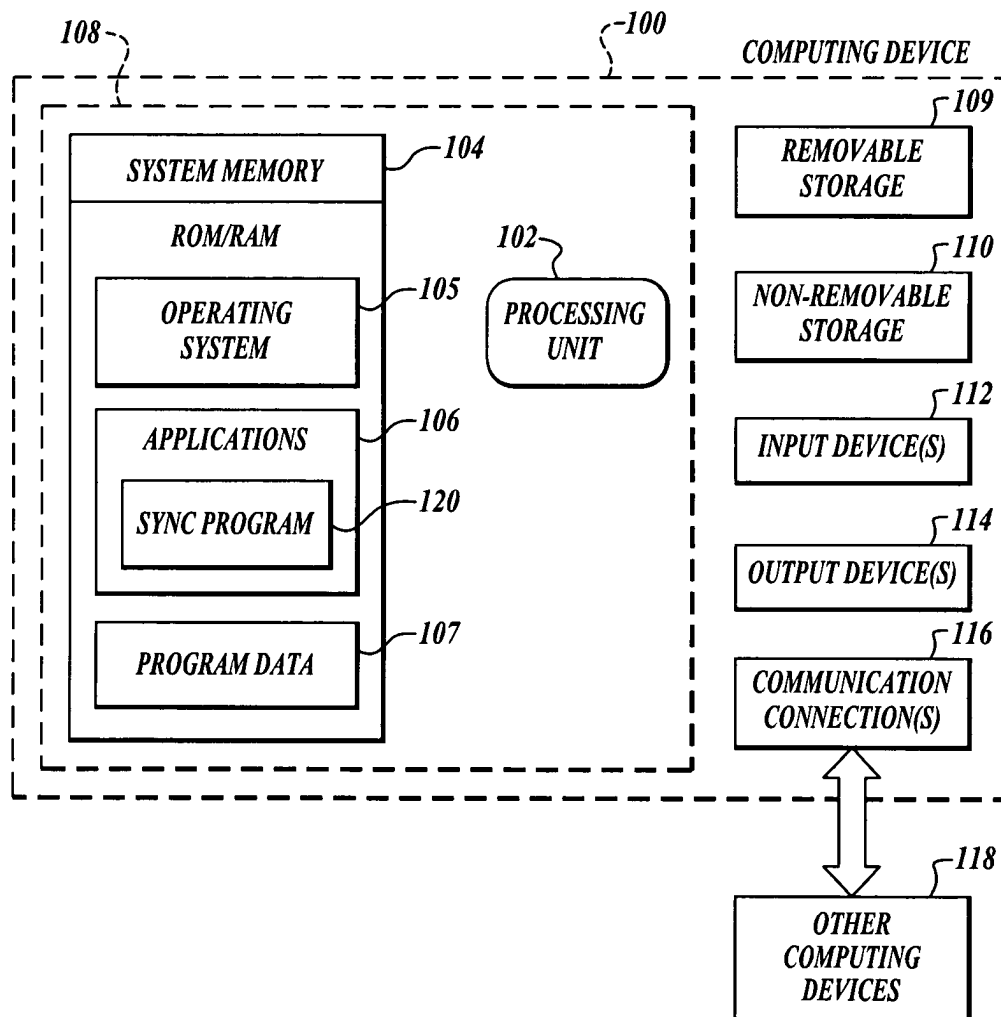


Fig. 1

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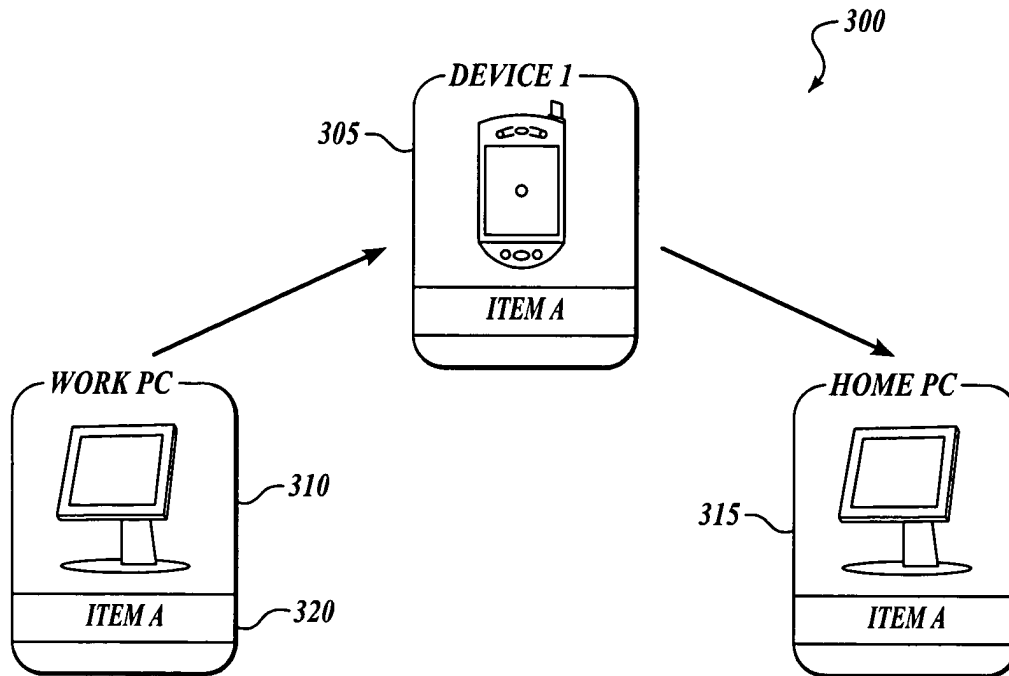
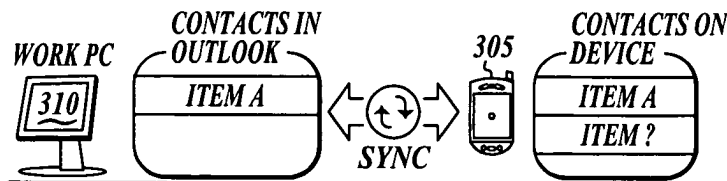


Fig. 3

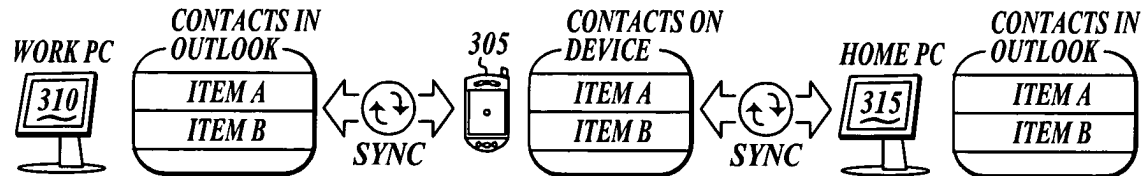
1. SYNC ONE DATA SOURCE

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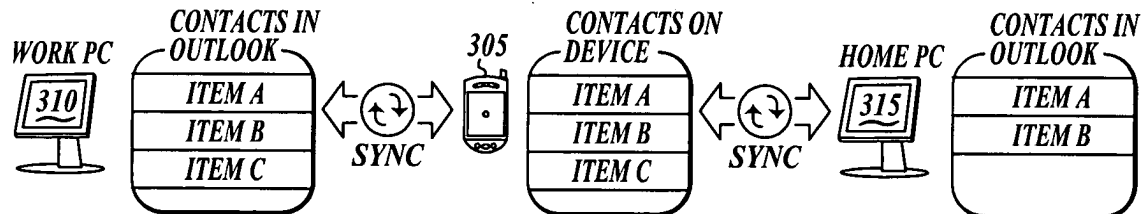
Fig. 4



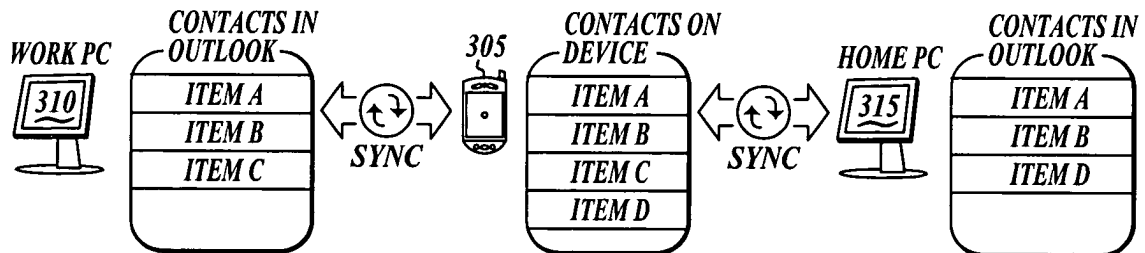
2. ADD SECOND DATA SOURCE. USER CHOOSES TO CROSS-POLLINATE AT DATA SOURCE CREATION TIME



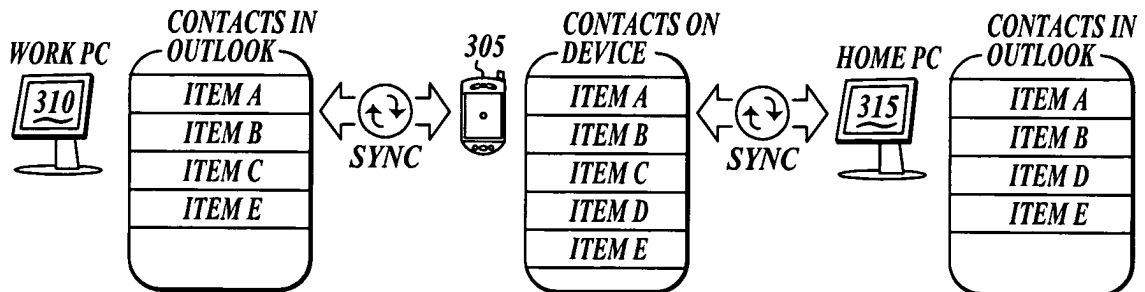
3. CHANGE ACTIVESYNC SETTINGS: ITEMS CREATED ON DEVICE SYNC TO WORK PC ITEMS FROM WORK PC & HOME PC DO NOT CROSS-POLLINATE



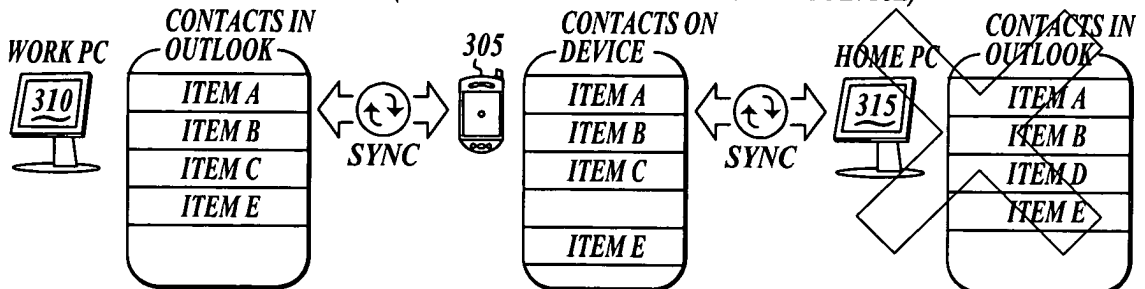
4. CHANGE ACTIVESYNC SETTINGS: ITEMS CREATED ON DEVICE SYNC TO WORK PC ITEMS FROM WORK PC & HOME PC DO NOT CROSS-POLLINATE. CREATE ITEM ON THE HOME PC



5. CHANGE ACTIVESYNC SETTINGS ITEMS CREATED ON DEVICE SYNC TO WORK PC & HOME PC. ITEMS CROSS-POLLINATE WHEN CREATED ON HOME OR WORK PCS CREATE ITEM ON THE WORK PC



6. DELETE HOME PC DATA SOURCE (NOTE ITEM D IS REMOVED FROM THE DEVICE)



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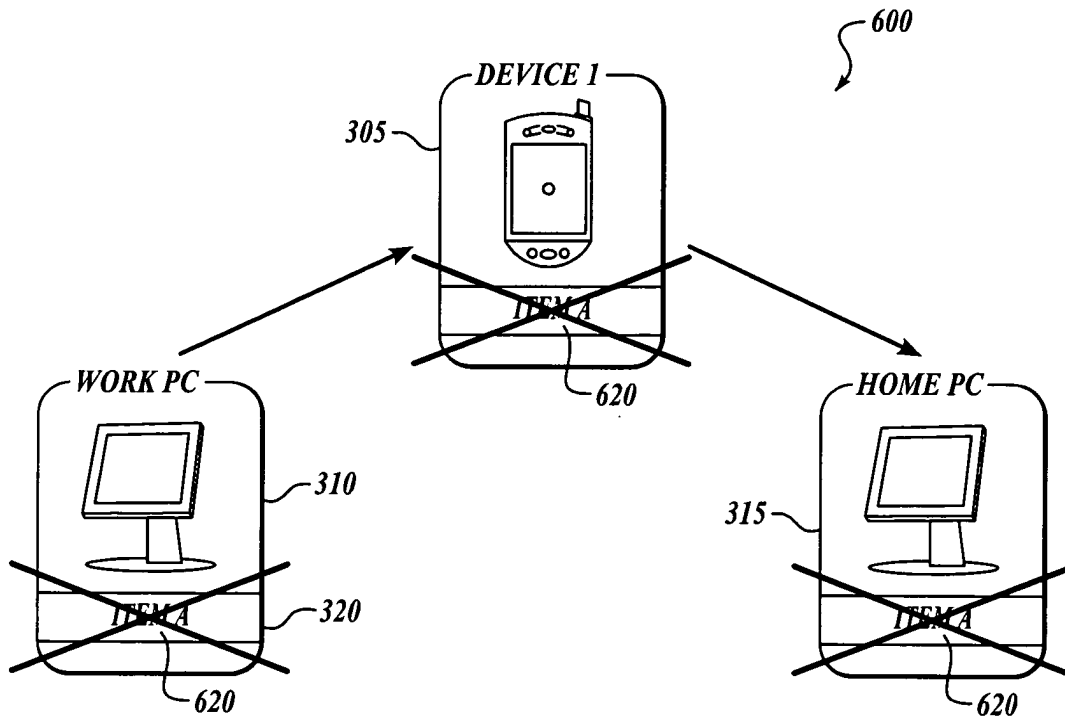


Fig. 6

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1. ITEM A HAS ALREADY SYNCED TO THE DEVICE FROM SERVER1

SERVER1			DEVICE		
ITEM	ServerID	SyncHash	ITEM	Server1-ID	SyncHash
A	SID1	HASH101	A	SID1	HASH101

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2. USER COPIES ITEM A, CREATING ITEM B WITH AN IDENTICAL SYNCHASH

SERVER1			DEVICE		
ITEM	ServerID	SyncHash	ITEM	Server1-ID	SyncHash
A	SID1	HASH101	A	SID1	HASH101
B	SID2	HASH101			

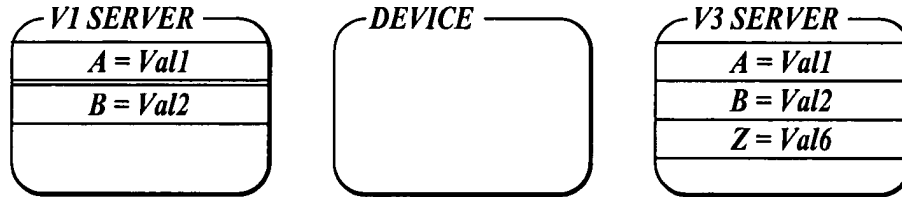
3. SYNC THE SERVER WITH THE DEVICE. ITEM B NOW SYNCs DOWN TO THE DEVICE. ALTHOUGH THE SYNCHASH MATCHES AN ITEM ON THE DEVICE, THE ITEM IT MATCHES IS ALREADY SYNCING WITH THE SERVER, SO A NEW ITEM IS CREATED.

SERVER1			DEVICE		
ITEM	ServerID	SyncHash	ITEM	Server1-ID	SyncHash
A	SID1	HASH101	A	SID1	HASH101
B	SID2	HASH101	B	SID2	HASH101

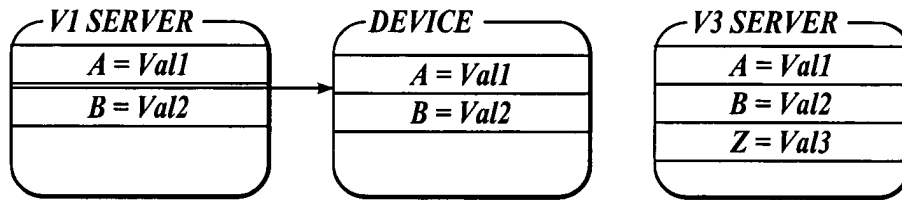
Fig. 8

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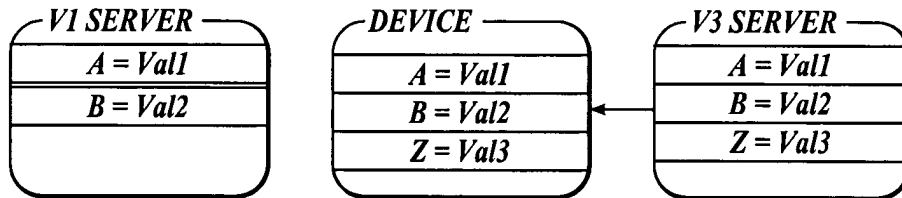
1. V1 SERVER SUPPORTS PROPERTIES A & B. V3 SERVER SUPPORTS A, B & Z.



2. FIRST SYNC WITH V1 SERVER PROPERTIES A & B



3. SYNC WITH V3 SERVER. ITEM DETECTED AS A DUPLICATE AFTER COMPARING PROPERTIES A & B. SYNC DOWN PROPERTIES A, B, Z.



4. SQL-CE CHANGE TRACKING ON DEVICE RECORDS A CHANGE ONLY TO PROPERTY Z. WHEN DEVICE NEXT SYNCs WITH V1 IT NOTES A CHANGE TO THE ITEM, BUT NOT IN ANY PROPERTIES IT SYNCs (ONLY Z HAS CHANGED). NO ADDITIONAL SYNC OCCURS.

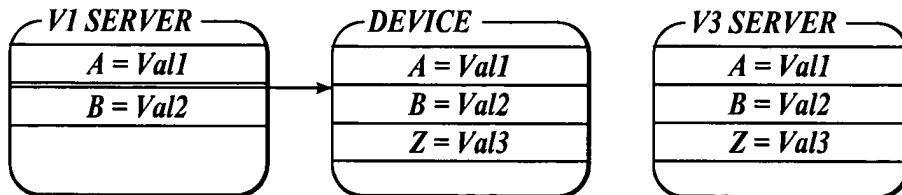
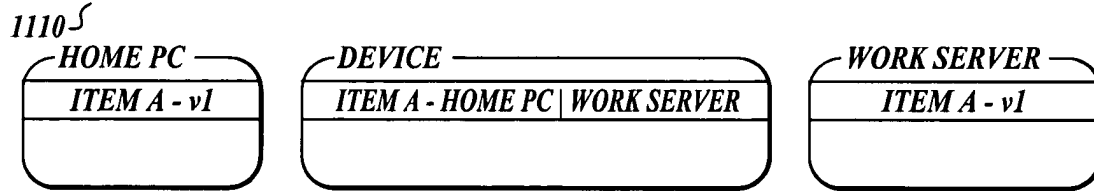


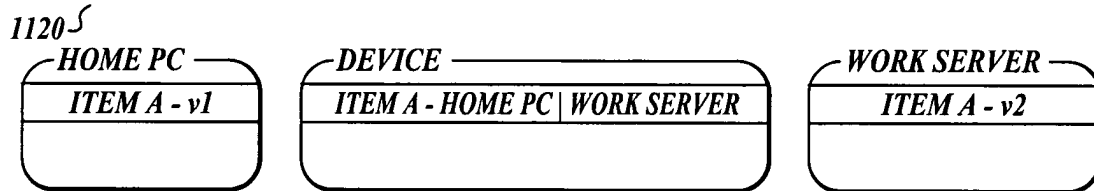
Fig.10

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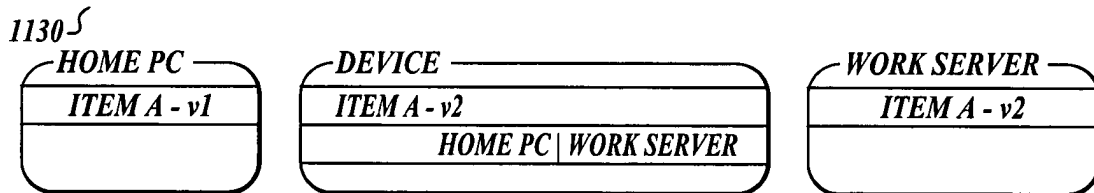
1. ITEM A HAS PREVIOUSLY CROSS-POLLINATED TO HOME PC & WORK SERVER



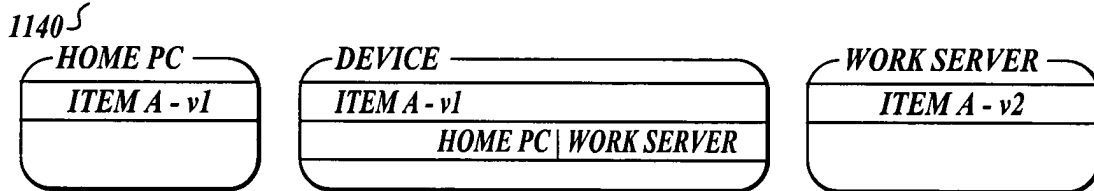
2. EDIT TIME ON WORK SERVER



3. SYNC WITH WORK SERVER



4. SYNC WITH HOME PC. DEVICE SET TO SERVER WINS. ITEM v1 NOW ON DEVICE.



5. SYNC WITH WORK SERVER. [NO CONFLICT] ITEM v1 NOW ON WORK SERVER AS WELL.

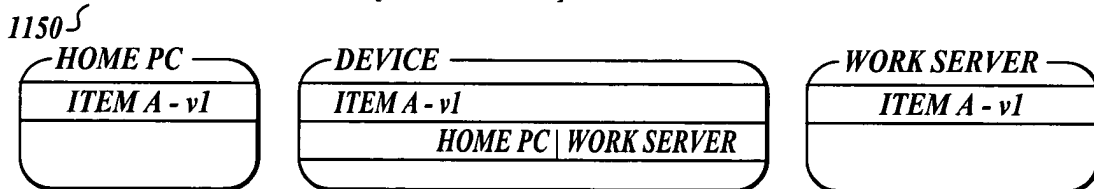
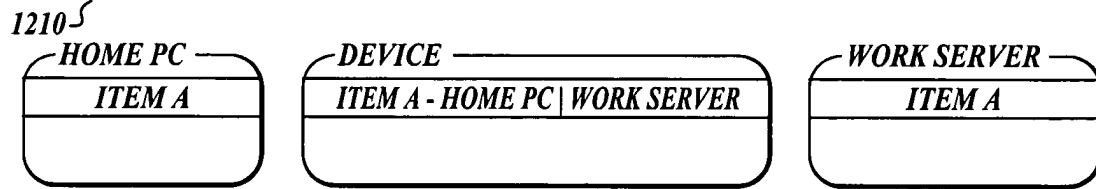


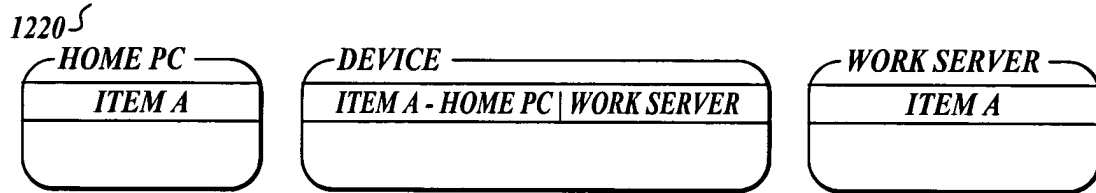
Fig. 11

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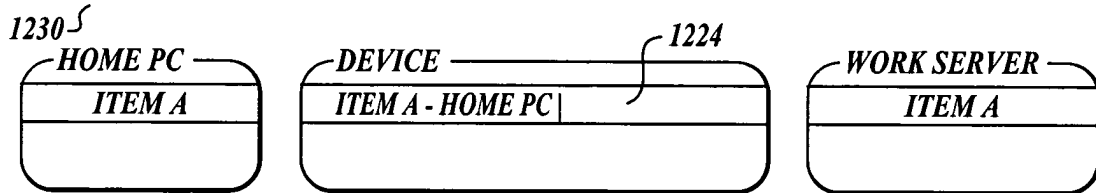
1. ITEM A HAS PREVIOUSLY CROSS-POLLINATED TO HOME PC & WORK SERVER



2. SYNC KEY 0 AT WORK SERVER



3. DELETE SERVERIDS FOR WORK SERVER



4. SYNC DOWN ITEM A FROM WORK SERVER AS AN ADD. ITEM IS DETECTED AS DUPLICATE. HOME PC VERSION IS KEPT.

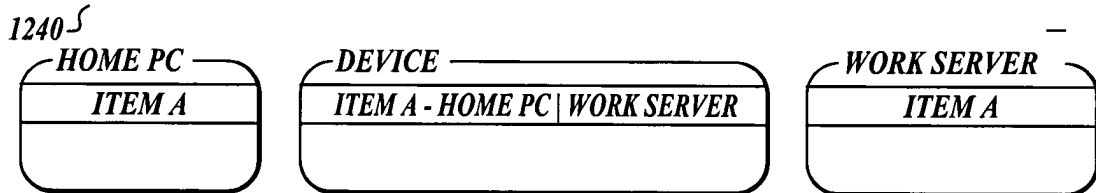


Fig. 12

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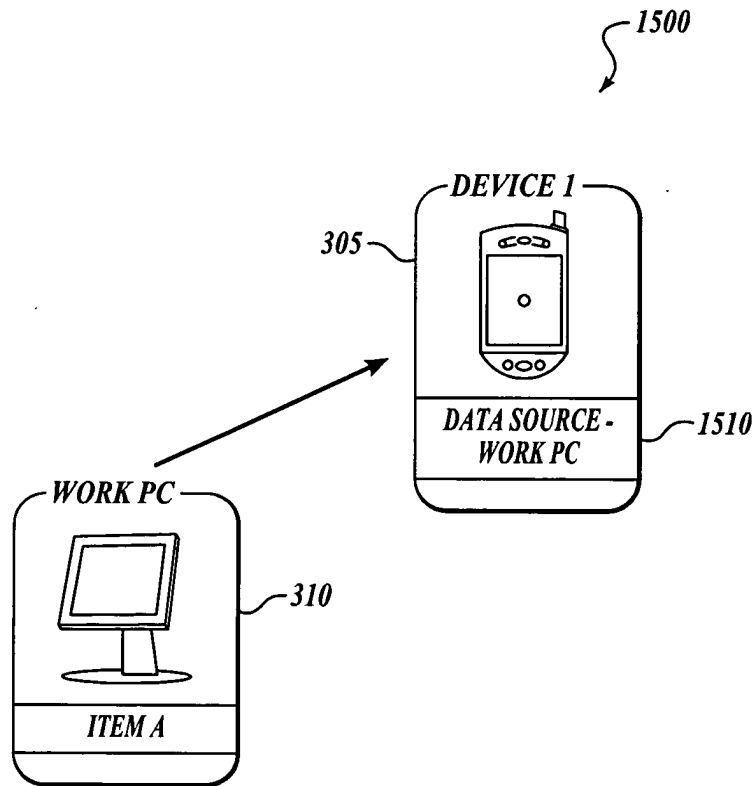


Fig.15